

# A Randomized Control Trial to Compare the Efficacy of Routine Soap Water V/S Alcohol Based Hand Sanitizer in Pre-Operative Scrubbing at Tertiary Health Centre in Western India

Dr. Jalpesh Majethiya<sup>1</sup>, Dr. Viral Shah<sup>2</sup>, Dr. Shaiva Patel<sup>3,\*</sup>, Dr. Rashmi Sharma<sup>4</sup>

<sup>1</sup>Assistant Professor, <sup>2</sup>Associate Professor, <sup>3</sup>Senior Resident, Department of General Surgery, <sup>4</sup>Professor and HOD, Department of Community Medicine, GMERS Medical College and Civil Hospital, Sola, Ahmedabad, Gujarat, India.

**Corresponding Author:** Dr. Shaiva Patel

**E-Mail:** [patelshaiva@gmail.com](mailto:patelshaiva@gmail.com)



## ABSTRACT

**Introduction:** Hand Hygiene is important for preventing healthcare related infections. Effective hand scrubbing is important for the success of surgical procedure. Pre operative scrubbing using soap and water is routinely used, however, there are many benefits of using alcohol-based hand sanitizer in pre-operative scrubbing. **Objective:** The objective was to compare the efficacy of Routine soap water scrubbing versus Alcohol based hand sanitizer in pre-operative scrubbing by comparing the microbiological profile of swab samples of scrubbed participants. **Materials and Methods:** Total 200 participants who got scrubbed in the Surgery Department of an Ahmedabad based medical college, were enrolled for the study. Study design chosen was randomized trial where out of 200 participants, 100 each were randomly allocated into two groups of (1) Routine soap water scrubbing and (2) Alcohol-based hand sanitizer scrubbing. After hand scrubbing in either of the group, every participant was sampled from different areas of hand immediately before the operation. The samples were sent for culture and sensitivity (C & S) testing and results obtained were documented. **Results:** No growth of organism was observed in C & S reports from the swabs of all 200 participants. **Conclusions:** Alcohol based hand sanitizer is equally efficacious to Routine soap water scrubbing in preoperative scrubbing.

**Keywords:** Soap water scrub, Alcohol-based hand sanitizer, pre-operative scrubbing,